

**Amendment to the Claims**

This following Listing of Claims replaces all prior versions and listings of claims in the application:

**Listing of Claims:**

1. (Previously Presented) A light emitting apparatus comprising:  
a light emitting device disposed on a supporting body; and  
a coating layer comprising a fluorescent substance and covering at least a surface of said light emitting device, said fluorescent substance absorbs at least a portion of light emitted by said light emitting device and emits light of a different wavelength;  
wherein said coating layer comprises an oxide including at least one element selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals, and a hydroxide including at least one element selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals.
2. (Previously Presented) The light emitting apparatus according to 1,  
wherein said hydroxide contains the same metal as that of said oxide.
3. (Previously Presented) The light emitting apparatus according to 1,  
wherein said fluorescent substance in said coating layer is surrounded by particles comprising said oxide.
4. (Previously Presented) The light emitting apparatus according to 1,  
wherein said coating layer comprises an organometallic compound comprising at least one element selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals.
5. (Previously Presented) The light emitting apparatus according to 1,

wherein said coating layer has a substantially uniform thickness over a top surface, a side face and a corner of said light emitting device.

6. (Previously Presented) The light emitting apparatus according to 1, wherein said coating layer covers the surface of said supporting body and the entire surface of said light emitting device, and the thickness of said coating layer on a top surface, a side face and a corner of said light emitting device and the thickness of said coating layer on a surface of said supporting body are substantially the same.

7. (Previously Presented) The light emitting apparatus according to 1, wherein said coating layer comprises at least two layers, each layer having a refractive index that is smaller than that of a nitride semiconductor of said light emitting device, and the refractive index of each layer decreases gradually with the distance from said light emitting device.

8. (Previously Presented) The light emitting apparatus according to 1, wherein said light emitting device is disposed so as to oppose the top surface of said supporting body via an adhesive layer, while the adhesive layer contains the same material as that of said coating layer.

9. (Previously Presented) The light emitting apparatus according to 8, wherein said adhesive layer contains particles of an oxide and a hydroxide.

10. (Previously Presented) The light emitting apparatus according to 8, wherein said adhesive layer extends over a side face of said light emitting device.

11. (Previously Presented) The light emitting apparatus according to 1, wherein said light emitting device has an emission peak at a wavelength from 250 nm to 530 nm, and an emission wavelength of said fluorescent substance is longer than a wavelength of the main emission peak of said light emitting device.

12. (Previously Presented) The light emitting apparatus according to 1,  
wherein said fluorescent substance is yttrium aluminum garnet-containing  
fluorescent substance that includes: Y; Al; at least one element selected from the group  
consisting of Lu, Sc, La, Gd, Tb, Eu and Sm; and at least one element selected from the group  
consisting of Ga and In,  
and said fluorescent substance is activated with a rare earth element.

13. (Previously Presented) The light emitting apparatus according to 1,  
wherein said fluorescent substance includes: N; at least one element selected from  
the group consisting of Be, Mg, Ca, Sr, Ba and Zn; at least one element selected from the group  
consisting of C, Si, Ge, Sn, Ti, Zr and Hf; and a nitride-containing fluorescent substance  
activated with a rare earth element.

14. (Previously Presented) The light emitting apparatus according to 1,  
wherein said light emitting device emits light in ultraviolet region and said  
coating layer contains at least one fluorescent substance selected from the group consisting of:

- (1)  $\text{Ca}_{10}(\text{PO}_4)_6\text{FCl}$ : Sb, Mn
- (2)  $\text{M}_5(\text{PO}_4)_3\text{Cl}$ : Eu (M represents at least one element selected from the group  
consisting of Sr, Ca, Ba, Mg)
- (3)  $\text{BaMg}_2\text{Al}_{16}\text{O}_{27}$ : Eu
- (4)  $\text{BaMg}_2\text{Al}_{16}\text{O}_{27}$ : Eu, Mn
- (5)  $3.5\text{MgO} \cdot 0.5\text{MgF}_2 \cdot \text{GeO}_2$ : Mn
- (6)  $\text{Y}_2\text{O}_2\text{S}$ : Eu
- (7)  $\text{Mg}_6\text{As}_2\text{O}_{11}$ : Mn
- (8)  $\text{Sr}_4\text{Al}_{14}\text{O}_{25}$ : Eu
- (9)  $(\text{Zn}, \text{Cd})\text{S}$ : Cu
- (10)  $\text{SrAl}_2\text{O}_4$ : Eu
- (11)  $\text{Ca}_{10}(\text{PO}_4)_6\text{ClBr}$ : Mn, Eu
- (12)  $\text{Zn}_2\text{GeO}_4$ : Mn
- (13)  $\text{Gd}_2\text{O}_2\text{S}$ : Eu, and
- (14)  $\text{La}_2\text{O}_2\text{S}$ : Eu

15. (Previously Presented) The light emitting apparatus according to 1,  
wherein said supporting body has a lead electrode and said light emitting device is  
provided on said supporting body that is insulated from said lead electrode.

16-17 (Canceled).

18. (Previously Presented) A light emitting apparatus comprising: a supporting body;  
an adhesive layer, and a light emitting device comprising a gallium nitride-containing compound  
semiconductor layer, said light emitting device being disposed on said supporting substrate via  
the adhesive layer;

wherein said adhesive layer comprises an oxide containing at least one element  
selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth  
metals, and a hydroxide containing at least one element selected from the group consisting of Si,  
Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals,

wherein said adhesive layer extends over a side face of the light emitting device.

19. (Previously Presented) A light emitting apparatus comprising: a supporting body;  
an adhesive layer, and a light emitting device comprising a gallium nitride-containing compound  
semiconductor layer, said light emitting device being disposed on said supporting substrate via  
the adhesive layer;

wherein said adhesive layer comprises an oxide containing at least one element  
selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth  
metals, and a hydroxide containing at least one element selected from the group consisting of Si,  
Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals,

wherein said light emitting device has a main emission peak at a wavelength in a  
range from 250 nm to 530 nm.

20. (Previously Presented) A light emitting apparatus comprising: a supporting body;  
an adhesive layer, and a light emitting device comprising a gallium nitride-containing compound

semiconductor layer, said light emitting device being disposed on said supporting substrate via the adhesive layer;

wherein said adhesive layer comprises an oxide containing at least one element selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals, and a hydroxide containing at least one element selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals,

wherein the adhesive layer comprises a filler having a heat conductivity higher than that of said oxide.

21. (Previously Presented) The light emitting apparatus according to 1 or 15, wherein said light emitting device includes:  
a support substrate;  
a junction layer that is formed on one principal surface of the support substrate, said junction layer having a eutectic layer; and  
stacked layers comprising a p-type nitride semiconductor layer of single-layer or multi-layer structure formed on the junction layer, an active layer formed on the p-type nitride semiconductor layer, and an n-type nitride semiconductor layer of single-layer or multi-layer structure formed on the active layer.

22. (Previously Presented) The light emitting apparatus according to 21, wherein at least part of a surface of the stacked layers has a concave-convex shape.

23. (Withdrawn) A method of manufacturing a light emitting apparatus comprising a light emitting device disposed on a supporting body; a fluorescent substance that absorbs at least a portion of light emitted from said light emitting device and emits light of a different wavelength; and a coating layer that includes said fluorescent substance and covers at least the surface of said light emitting device, the method comprising:

a first step of preparing a coating solution that contains an organometallic compound including at least one element selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals; an organic solvent; and a fluorescent substance;

a second step of applying said coating solution onto the surface of said light emitting device and the surface of said supporting body; and  
a third step of drying said coating solution so as to fix said fluorescent substance.

24. (Withdrawn) The method of manufacturing a light emitting apparatus according to 23,

wherein boiling point of said organic solvent used in said first step is in a range from 100°C to 200°C.

25. (Withdrawn) The method of manufacturing a light emitting apparatus according to 23,

wherein said coating solution used in said first step is a hydrolyzed solution having viscosity in a range from 2.5 to 500 cps at 25°C.

26. (Withdrawn) The method of manufacturing a light emitting apparatus according to 23,

wherein said coating solution used in said first step has acid concentration in a range from 20 to 500 ppm.

27. (Withdrawn) The method of manufacturing a light emitting apparatus according to 23,

wherein said coating solution including said fluorescent substance is sprayed in the form of mist of rotating spiral stream onto said light emitting device from above, while said light emitting device mounted on said supporting body is heated in said second step.

28. (Withdrawn) The method of manufacturing a light emitting apparatus according to 23,

wherein said light emitting device is heated to a temperature in a range from 50°C to 300°C in said second step.

29. (Withdrawn) The method of manufacturing a light emitting apparatus according to 23,

wherein the organometallic compound used in said first step is at least one selected from the group consisting of methyl silicate, ethyl silicate, N-propyl silicate, N-butyl silicate, aluminum isopropoxide, aluminum ethoxide and aluminum butoxide.

30. (Withdrawn) A method of manufacturing a light emitting apparatus having a supporting substrate; a light emitting device consisting of gallium nitride-based compound semiconductor layers formed on a substrate, said light emitting device being disposed so that the substrate-side surface of said light emitting device opposes the top surface of said supporting body via an adhesive layer, the method comprising:

a first step of preparing an adhesive solution that contains an organometallic compound containing at least one element selected from the group consisting of Si, Al, Ga, Ti, Ge, P, B, Zr, Y, Sn, Pb and alkali earth metals, and an organic solvent, so as to obtain a hydrolyzed solution having viscosity in a range from 2.5 to 500 cps at 25°C and acid concentration in a range from 20 to 500 ppm;

a second step of applying the adhesive solution to the top surface of said supporting body and placing said light emitting device on the adhesive solution; and

a third step of drying the adhesive solution at a temperature in a range from 50°C to 300°C so as to bond the top surface of said supporting body and the substrate-side surface of said light emitting device.

31. (Withdrawn) The method of manufacturing a light emitting apparatus according to 30,

wherein boiling point of said organic solvent used in said first step is in a range from 100°C to 200°C.

32. (Withdrawn) The method of manufacturing a light emitting apparatus according to 30,

wherein said organometallic compound used in said first step is at least one selected from the group consisting of metal alkoxide, metal diketonate and metal carbonate.

33. (Withdrawn) The method of manufacturing a light emitting apparatus according to 30,

wherein said adhesive layer contains a filler having heat conductivity higher than that of the oxide generated from said organometallic compound.

34. (Withdrawn) A method of manufacturing a light emitting apparatus having a light emitting device disposed on a supporting body; a fluorescent substance that absorbs at least a portion of light emitted by said light emitting device and emits light of a different wavelength; and a coating layer that includes the fluorescent substance and covers from the surface of said supporting body to the entire surface of said light emitting device,

wherein a coating solution containing said fluorescent substance is sprayed in the form of mist of rotating spiral stream onto said light emitting device from above, while said light emitting device mounted on said supporting body is heated.

35. (Withdrawn) The method of manufacturing a light emitting apparatus according to 34,

wherein the diameter of the spiral stream increases from the start point of the spray located above said light emitting device toward the surface of said light emitting device.

36. (Withdrawn) The method of manufacturing a light emitting apparatus according to,

wherein rotating speed of said coating solution decreases from the start point of the spray located above said light emitting device toward the surface of said light emitting device.

37. (Withdrawn) The method of manufacturing the light emitting apparatus according to 23, 30 or 34,

wherein said light emitting device comprises  
a support substrate,



a junction layer that is formed on one principal surface of said support substrate, said junction layer having a eutectic layer; and

stacked layers including a p-type nitride semiconductor layer of single-layer or multi-layer structure formed on the junction layer, an active layer formed on the p-type nitride semiconductor layer; and an n-type nitride semiconductor layer of single-layer or multi-layer structure formed on the active layer.

38. (Withdrawn) The method of manufacturing a light emitting apparatus according to 37,

wherein at least a portion of the surface of said stacked layers has a concave-convex shape.

39-41 ( Canceled).